

THAT WHICH IS CLAIMED:

Amendments to the Claims:

1. (Currently Amended) A method of selecting or de-selecting one or more groups of transponders, using a selection process comprising one or more commands from an interrogator, the one or more groups of transponders being within a field of interrogation, including the step of:

transmitting from the interrogator a select command that includes selection or de-selection criteria, wherein transponders within the one or more groups of transponders participate in an arbitration sequence, ~~based on~~ in response to an arbitration command, based on the selection or de-selection criteria.

2. (Currently Amended) A method of selecting or de-selecting one or more groups of transponders, using a selection process comprising one or more commands from an interrogator, the one or more groups of transponders being within a field of interrogation, including the step of:

transmitting from the interrogator a select command that includes data for comparison with data stored in the memories of the transponders within the one or more groups whereby the transponder or transponders within the one or more groups of transponders set or reset a select flag dependent on whether they are to be selected or de-selected and participate in an arbitration sequence, ~~based on~~ in response to an arbitration command, based on whether the select flag is set or reset.

3. (Previously Presented) A method as claimed in claim 2, wherein if the data in the transponder memory corresponds to that sent by the select command, the transponder is either selected or de-selected dependent on the setting of the select flag in the transponder.

4. (Previously Presented) A method as claimed in claim 2, wherein if the data in the transponder memory does not correspond to that sent by the select command, the transponder is either selected or de-selected dependent on the setting of the select flag in the transponder.

5. (Previously Presented) A method as claimed in claim 2, wherein the select flag is connected to one or more logic gates which together define selection logic circuitry of the transponder.

6. (Currently Amended) A method as claimed in claim 2, wherein the select flag is in the form of a bistable or flip-flop, the select flag determining whether the transponder should respond to an arbitration command comprising a Query command from the interrogator or participate in an arbitration sequence or not.

7. (Previously Presented) A method as claimed in claim 6, wherein if the select flag is set, the transponder will reply to the Query command, or if not set, will not reply to the Query command.

8. (Original) A method as claimed in claim 6, wherein if the select flag is not set, the transponder is adapted to participate in an arbitration sequence or reply to a Query command.

9. (Previously Presented) A method as claimed in claim 2, wherein the select flag serves as an exclusion mechanism, whereby one or more groups of transponders may be excluded from the arbitration sequence using this same select flag as part of a determination mechanism.

10. (Previously Presented) A method as claimed in claim 2, wherein the selection or de-selection of one or more groups of transponders, uses a number of commands with parameters to address one or more groups of transponders using any content of the transponder memory as a target selection field.

11. (Previously Presented) A method as claimed in claim 1 wherein the selection process is undertaken either as part of an arbitration process or as an independent process.

12. (Previously Presented) A method as claimed in claim 1, wherein the selection process allows one or more groups of transponders to be selected, excluded or a combination of selection and exclusion using one command with a settable/resettable exclude flag.

13. (Currently Amended) A method as claimed in claim 12, wherein said one command is a select command the parameters of which allow one or more groups of transponders within the one or more groups of transponders to be placed in a selected condition or removed from the selected condition according to a selection mask which is compared with a portion or all of the memory contents stored on the one or more groups of transponders.

14. (Currently Amended) A method as claimed in claim 12, wherein said ~~one~~-arbitration command is a connect command used to address one or more groups of transponders within the one or more groups of transponders in order to conduct a dialogue.

15. (Currently Amended) A method as claimed in claim 12, wherein said ~~one~~-arbitration command is a Query command used to allow the interrogator to query the one or more groups of transponders for the presence of any transponders which have met the selection criteria.

16. (Currently Amended) A method as claimed in claim 12, wherein said ~~one~~-arbitration command is an acknowledge command used to acknowledge the successful completion of an arbitration sequence of completion of a dialogue with a transponder.

17. (Currently Amended) A method as claimed in claim 13, wherein said ~~one~~ arbitration command is a singulate command used during an arbitration sequence to place an individual transponder into a state whereby a dialogue may be conducted with it.

18. (Currently Amended) A transponder comprising logic circuitry responsive to a select command from an interrogator, whereby if the transponder meets selection or de-selection criteria in the select command it is selected or deselected and wherein the transponder participates in an arbitration sequence, ~~based on~~ in response to an arbitration command and based on whether ~~it~~ the transponder is selected or deselected.

19. (Previously Presented) A transponder as claimed in claim 18, wherein the transponder has a memory, a select flag and a comparator for comparing data in the select command with data in the memory, whereby the transponder sets or resets the select flag dependent on whether it is to be selected or de-selected.

20. (Previously Presented) A transponder as claimed in claim 19, wherein if the data in the transponder memory does not correspond to that sent by the select command, the transponder is either selected or de-selected dependent on the setting of the select flag in the transponder; or if the data in the transponder memory does correspond to that sent by the select command, the transponder is still selected or deselected dependent on the setting of the select flag.

21. (Previously Presented) A transponder as claimed in claim 19, wherein the select flag is connected to one or more logic gates which together define selection logic circuitry of the transponder.

22. (Currently Amended) A transponder as claimed in claim 19, wherein the select flag is in the form of a bistable or flip-flop, the select flag determining whether the transponder should

respond to an arbitration command comprising a Query command from the interrogator or participate in an arbitration sequence or not.

23. (Previously Presented) A transponder as claimed in claim 19, wherein if the select flag is set, the transponder will reply to a Query command or if not set, will not reply to a Query command.

24. (Previously Presented) A transponder as claimed in claim 19, wherein if the select flag is not set, the transponder is adapted to participate in an arbitration sequence or reply to a Query command.

25. (Previously Presented) A transponder as claimed in claim 19, wherein the select flag serves as an exclusion mechanism, whereby groups or sub-groups of transponders may be excluded from participation in the arbitration sequence using this same select flag as part of a determination mechanism.

26. (Cancelled).

27. (Previously Presented) A transponder as claimed in claim 19, wherein a settable/resettable exclude flag is provided whereby the selection process can select individual or groups of transponders to be selected, excluded or a combination of selection and exclusion using just one command.

28. (Currently Amended) A transponder as claimed in claim 27, said ~~one~~ arbitration command is the select command, the parameters of which allows the transponder to be placed in a selected condition or removed from the selected condition according to a selection mask which is compared with a portion or all of the memory contents stored on the transponder.

29. (Currently Amended) A transponder as claimed in claim 27, wherein the transponder is responsive to ~~one~~the arbitration command wherein said ~~one~~arbitration command is a connect command which is used to address one or more transponders within the one or more groups of transponders .

30. (Currently Amended) A transponder as claimed in claim 27, wherein the transponder is responsive to ~~one~~the arbitration command wherein said ~~one~~arbitration command is a Query command which is used to allow the interrogator to query the one or more groups of transponders for the presence of any transponders which have met the selection criteria.

31. (Currently Amended) A transponder as claimed in claim 30, wherein the ~~transducer~~transponder is responsive to ~~one~~the arbitration command wherein said ~~one~~arbitration command is an acknowledge command which is used to acknowledge the successful completion of an arbitration sequence or completion of a dialogue with a transponder.

32. (Currently Amended) A transponder as claimed in claim 31, wherein the transponder is responsive to ~~one~~the arbitration command wherein said ~~one~~arbitration command is a singulate command which is used during an arbitration sequence to place an individual transponder into a state whereby a dialogue may be conducted with it.

33. (Currently Amended) An identification system comprising an interrogator and a plurality of transponders, the interrogator including a transmitter for transmitting selection or de-selection criteria in one or more commands to select or de-select one or more groups of transponders, each transponder within the one or more groups of transponders including a receiver for receiving the one or more commands and logic circuitry responsive to the commands, whereby if the transponder meets selection or de-selection criteria in the commands it is selected or deselected wherein the transponder participates in an arbitration sequence based in response to an arbitration command and on the selection or deselection criteria based on whether the transponder is selected or deselected.

34. (Previously Presented) An identification system as claimed in claim 33, wherein the selection or de-selection criteria is in the form of data in one or more select commands, the data to be compared with data in a memory or memories of the one or more groups of transponders within a field of interrogation, whereby each transponder within the one or more groups of transponders set or reset a select flag dependent on whether they are to be selected or de-selected.

35. (Cancelled).

36. (Currently Amended) An integrated circuit for use in a transponder including a receiver for receiving a select command from an interrogator, the integrated circuit further comprising logic circuitry responsive to a select command from the interrogator whereby if the integrated circuit meets selection or de-selection criteria in the select command it is selected or deselected and the integrated circuit participates in an arbitration sequence ~~based on~~ in response to an arbitration command and based on the selection or deselection criteria.

37. (Previously Presented) An integrated circuit as claimed in claim 36, comprising a memory, a select flag and a comparator for comparing data in the select command with data in the memory, whereby the circuitry sets or resets the select flag dependent on whether it is to be selected or de- selected.

38. (Previously Presented) An integrated circuit as claimed in claim 37, wherein if the data in the memory does not correspond to that sent by the select command, the integrated circuit is either selected or de-selected dependent on the setting of the select flag in the integrated circuit; or if the data in the memory does correspond to that sent by the select command, the integrated circuit is still selected or deselected dependent on the setting of the select flag.

39-62. (Cancelled).

63. (Previously Presented) A plurality of transponders, each of which is as claimed in claim 19, wherein the selection or de-selection of an individual transponder, or group of transponders, uses a selection process comprising a number of commands with parameters to address a population of transponders using any content of the transponder memory as a target selection field.

64. (Previously Presented) An integrated circuit as claimed in claim 37, wherein the select flag is connected to one or more logic gates which together define selection logic circuitry of the integrated circuit.

65. (Currently Amended) An integrated circuit as claimed in claim 37, wherein the select flag is in the form of a bistable or flip-flop, the select flag determining whether the transponder should respond to the arbitration command comprising a Query command from the interrogator or participate in an arbitration sequence or not.

66. (Previously Presented) An integrated circuit as claimed in claim 37, wherein if the select flag is set, the transponder will reply to the Query command, or if the select flag is not set, will not reply to the Query command.

67. (Previously Presented) An integrated circuit as claimed in claim 37, wherein if the select flag is not set, the transponder is adapted to participate in an arbitration sequence or reply to the Query command.

68. (Previously Presented) An integrated circuit as claimed in claim 37, wherein the select flag serves as an exclusion mechanism, whereby one or more groups of transponders may be excluded from the arbitration sequence using this same select flag as part of a determination mechanism.



69. (Previously Presented) An integrated circuit as claimed in claim 37, wherein a settable/resettable exclude flag is provided whereby the selection process can select individual or groups of transponders to be selected, excluded or a combination of selection and exclusion using just one command.

70. (Previously Presented) An integrated circuit as claimed in claim 69, wherein said one command is the select command, the parameters of which allow the transponder to be placed in a selected condition or removed from the selected condition according to a selection mask which is compared with a portion or all of the memory contents stored on the integrated circuit.

71. (Currently Amended) An integrated circuit as claimed in claim 70, wherein the integrated circuit is responsive to ~~one~~the arbitration command, the ~~one~~arbitration command being a connect command which is used by the interrogator to address one or more groups of transponders in order to conduct a dialogue.

72. (Currently Amended) An integrated circuit as claimed in claim 71, wherein the integrated circuit is responsive to ~~one~~the arbitration command, the ~~one~~arbitration command being a Query command which is used to allow the interrogator to query the one or more groups of transponders for the presence of any transponders which have met the selection criteria.

73. (Currently Amended) An integrated circuit as claimed in claim 72, wherein the integrated circuit is responsive to ~~one~~the arbitration command, the ~~one~~arbitration command being an acknowledge command which is used to acknowledge the successful completion of an arbitration sequence of completion of a dialogue with the a transponder.

74. (Currently Amended) An integrated circuit as claimed in claim 73, wherein the integrated circuit is responsive to the ~~one~~arbitration command, the ~~one~~arbitration command being a singulate command which is used during an arbitration sequence to place an individual transponder into a state whereby a dialogue may be conducted with it.